PROCEEDINGS OF THE NEW YORK ENTOMOLOG-ICAL SOCIETY.

MEETING OF TUESDAY, DECEMBER 7, 1909.

Held at the American Museum of Natural History at 8.15 P. M. President C. W. Leng in the chair, with twenty-one members present.

Dr. Lutz, the curator, exhibited the two maps, presented by Prof. Smith, properly mounted for preservation, also the local fifty-mile limit map so far as it was completed. He spoke in a very general way concerning the additions to the local collection.

Mr. Southwick reported progress in regard to the preparation of the volume devoted to the preservation of historical letters. Mr. Miner spoke on "Myriopods—Their General Structure and Classification." He characterized the group Myriopoda, differentiating them from insects and spiders, and outlined their distribution which is almost world-wide, owing to their ability to tolerate extremes of all conditions. He described their food, and spoke of the general lack of interest in the group, because of its slight economic importance, the historical knowledge of the group, the nomenclature and classification. He exhibited a number of excellent lantern slides showing phylogenetic tables, various details of structure, which were commented upon, and some of the typical species.

Mr. Engelhardt spoke on "A Collecting Trip Through North Carolina." He and Mr. Pollard left New York, July 17, for Washington, D. C., where they spent a few pleasant and profitable hours on Plummer's Island with a number of Washington entomologists. Thence they went to the Dismal Swamp, in which so far as collecting was concerned, they were disappointed. As they proceeded further south along the coast they found their best collecting at Roanoke Island, and near Wilmington, N. C. From this point they proceeded west to the Blue Ridge in the western part of the state, where, by means of a wagon, they covered a considrable distance, collecting along the way. Mr. Engelhardt exhibited a number of lantern slides from photographs taken by himself, and discussed some of the interesting incidents, the character of the localities visited, and the peculiarities and habits of some of the mountaineers.

The Society then adjourned.

MEETING OF DECEMBER 21, 1909.

Held at the American Museum of Natural History at 8.15 P. M. President C. W. Leng in the chair, with eighteen members and one visitor, Mr. R. A. Vickery, of Washington, D. C., present.

Mr. Lutz, the curator, spoke concerning the "Local Record Cards" on which he desired to inscribe records from collections other than the local collection in order that they might be as complete as possible.

Mr. Southwick reported progress made by the committee in preserving the historical letters of the Society.

Mr. Dow proposed as an active member Mr. Fred Wintersteiner, I Borden Ave., Long Island City, and Mr. Davis proposed Mr. John A. Grossbeck, of the New Jersey Agricultural Experiment Station, New Brunswick, N. J.

On motion of Mr. Schaeffer the by-laws were suspended and the secretary authorized to cast a single ballot in favor of the election of the proposed members.

Mr. Dow moved that the president appoint a nominating committee to prepare a slate for the annual meeting of January 4. The motion was seconded and the president appointed Mr. Dow, Mr. Harris and Dr. Lutz.

Mr. Charles L. Pollard discussed certain features of the Lepidoptera collected on his recent trip to North Carolina with Mr. Engelhardt. He spoke first of the excellent collecting region in the vicinity of Virginia Beach, Va., stating that various northern and southern species met there on common ground. The most interesting butterfly observed was *Calephelis borealis*, which was quite abundant. *Cercyonis pegala* exhibited much variation, *Thecla cecrops* and *Lerema accius* were other species of interest.

At Roanoke Island Lepidoptera were not abundant. Several individuals of *Papilio palamedes* were seen, and one *P. cresphontes* was taken. A specimen of *Debis portlandia* was found in a thick, wooded swamp, the habitat being somewhat unusual for this butterfly.

Mr. Pollard described in some detail the flora and fauna of Smith's Island, at the mouth of Cape Fear River, pointing out that this island, from its proximity to the Gulf Stream, is remarkable for the distinctly southern facies of its biota. *Papilio palamedes* occurred here in abundance, feeding on the flowers of *Metastelina*, and was the only *Papilio* observed. *Anosia plexippus* was entirely replaced by *A. berenice*, but the supposed mimic of the latter, *Basilarchia floridana*, was not seen. *Eurema euterpe* and *E. elathea* were taken. *Phyciodes phaon* replaced *Ph. tharos*; and several southern Hesperidæ, as *Eudamus proteus* and *Prenes ocola* were also collected. The speaker referred briefly to the apparent scarcity of nocturnal and crepiscular Lepidoptera, very few having been taken either at light or sugar. In the mountains two male individuals of *Argynnis diana* were captured, also a *Debis* which it was stated might prove to be *D. cleola* Skinner.' Specimens of all of the species referred to were exhibited by Mr. Pollard.

Following Mr. Pollard's remarks Mr. Engelhardt spoke of the remaining orders in which collections had been made and exhibited a large number of specimens.

Mr. Engelhardt's observations along the coastal regions from Virginia Beach, Va., to Cape Fear, N. C., showed a very gradual transition from the northern to the southern fauna, so that, roughly estimated, the southern forms at Wilmington, N. C., did not exceed twenty-five per cent. In the mountains weather conditions interfered greatly with collecting, but of the specimens obtained not over ten per cent. could be called characteristically southern. Among others the following insects were mentioned: Colcoptera.—Tetracha carolina and virginica, both at Wilmington, N. C., and the latter also at Wilkesboro (altitude 1,500 ft.). Cicindela gratiosa was common on sandy roads in pine woods near Wilmington; C. marginata and dorsalis were swarming on the beach at Smith's Island; C. patruela at Linville Falls (2,500 ft. elevation); Cychrus elevatus was taken in the Dismal Swamp. It was black in color with thorax narrow and raised, and five others were taken at Wilkesboro. They were black with the thorax much broadened. Cychrus andrewsii and bicarinatus occurred throughout the mountains but were not common; Pasimachus marginatus, sublævis and depressus, the first two at Wilmington and the latter on the mountains only; other species were Pterostichus fallax, Callida viridis, Chlænius angustus, Coccinella oculata, Mallodon melanopus and dasystorius from Wilmington; Lucanus elaphus and Polymachus brevipcs from Blowing Rock (4,000 ft.). By means of an acetylene bulls-eye lantern many species of Carabidæ were captured at night.

Orthoptera.—About forty species were taken, including Conocephalus hoplomachus from Wilmington and Œcanthus esclamationis from Johnson City, Tenn. Of interest is the aquatic habit of Orchelimum volantum which was abundant about the grassy borders of Greenfield Pond near Wilmington. When pursued and hard pressed it would dive into the water and cling to a submerged grass stem or the underside of a water-lily leaf, where it remained for several minutes, sustained by a supply of air which showed in glistening bubbles adhering to its body.

Hymenoptera and Diptera.—No special attention was paid to these orders. The specimens exhibited included many large and showy, but for the most part well-known species. A number of specimens of the so-called "yellow flies," and a species of *Chrysopa*, were pointed out as a great nuisance in Lake Drummond in the Dismal Swamp.

Odonata.—These were reported as being very numerous though restricted in the number of species. *Celithemis fasciata*, said to be very local, was found to be not uncommon at Wilmington, where Mr. Pollard also captured one specimen of *Gomphoides ambigua*, a new record for the United States, as this species has hitherto been recorded only from Mexico and Guatemala.

Myrmeleonida.—Seven or eight members of this family were observed in the costal regions, including Acanthachisis americana, the largest North American species, at Wilmington.

Hemiptera.—About sixty species including a Hygromystes and a Gelastocoris, both from Roanoke Island, and not yet described. Banasa packardi was met with in countless numbers clinging to the twigs and small branches of a cedar in Smith's Island. In color it resembled the scale-like leaves of the tree.

Cicadida.—Seven species were taken, two from Smith's Island and one from Blowing Rock, not yet determined. Four specimens of *Carincta parvula*, all females, were taken at Wilmington. At frequent intervals was heard an unusual song of a *Cicada*, sounding almost without exception from the high branches of pine trees. After many attempts one specimen was captured and

proved to be *Cicada pruinosa*. Apart from its structural characters it can readily be distinguished, even at quite a distance, by the peculiar song; this is a prolonged *zip*... accompanied at intervals by a metallic *twang-twang*.

Mr. E. D. Harris stated that recent correspondence with Mr. H. P. Loding, of Mobile, Ala., had elicited some facts regarding the periodicity of the local Cicindelids that will be of interest, and which Mr. Loding has kindly permitted him to communicate to the Society.

The forms taken by him in southern Alabama are Tetracha carolina, Cicindela repanda, hirticollis, nigrior, unicolor, sexguttata, rufiventris, cumatilis, punctulata, severa, abdominalis, soulavi, tortuosa, blanda, hamata, togata and gratiosa. The season opens with unicolor early in March, and this form continues until the latter part of May, disappearing to come again in October, late specimens occurring in the last part of December even up to Christmas. It varies in color from a deep blue to bright green, but is always immaculate. Mr. Loding expressly stating that he "has never seen any specimens with the least signs of markings." The closely related form of nigrior appears in the latter part of September and remains till the end of November. It is observed also in the spring. The two forms, unicolor and nigrior are not locally associated. The first specimens of repanda and gratiosa appear towards the end of March and remain till into September, the latter frequenting white sand, "high and dry," all over Mobile Co. Blanda occurs at Oak Grove and Grand Bay, "on wet white sand near creeks," from May to August. Punctulata appears in May, followed by tortuosa, and later by abdominalis, this last being very common on roads and paths until late in September. Scabiosa has not been observed, though careful search has been made for it. Hamata occurs near the water edge along the bay and gulf shores, through June, July and August. Sauleyi, with its immaculate form, is there in June and July. Rufiventris and cumatilis occur in greatest abundance in July and occasionally belated specimens linger till late in September. Togata occurs at Coden on sandy salt marshes. Hirticollis occurs sparingly with repanda in mid-summer. Scrguttata is not common, Mr. Loding reporting that he has taken but one specimen in five years. Severa, one of the rarer forms, occurs at Coden. "It keeps close to grass, is not shy, and is out more morning and evenings than in the middle of the day." The black form is the more common, the green being only occasionally met with. It is found on sandy salt marshes. Mr. Loding observes that in a series of unicolor taken in the middle of October of this year, all males had "the labrum and at least part of the mandibles white, and all females had both labrum and mandibles black or bluish."

Mr. William T. Davis exhibited dried specimens of a wild bean (*Phaseolus polystachus*) and some beans from the same species infested with a small weevil (*Apion griseus*).

Mr. Shoemaker exhibited a beautiful hand-painted specimen of the brilliant Australian butterfly, *Ornithoptera priamus*.

Mr. Dow recorded the capture of *Cicindela oncocisconensis* Harris at De Bruce, Sullivan Co., N. Y., at an elevation of 1,700 ft. Mr. Leng mentioned

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its further occurrence in the White Mountains, Buffalo, N. Y., and Pineville, Va.

The Society then adjourned.

ANNUAL MEETING, TUESDAY, JANUARY 4, 1910.

Held at the American Museum of Natural History. Vice-President E. B. Southwick presiding. Twenty-five members and one visitor present.

The minutes of the preceding meeting were read and approved.

The treasurer, Mr. Davis, read his annual report as follows:

Balance January 1, 1909\$	991.01	
Received from dues	187.50	
Interest on deposits	28.16	
Total\$1	,206.67	
Disbursements during 1909	65.51	
Balance		\$1,141.16

Society Account.

Journal Account.

Balance January 1, 1909	91.75	
Received, subscriptions and sale of Journal	377.67	
Received, sale of donated insects	6.50	
Total	475.92	
Disbursements for printing and mailing Journal	437.40	
Balance		38.52
Total Balance		\$1,179.68

Mr. Davis reported the election of twelve and the resignation of one member during the year, and a hundred and twenty-one subscribers to the Journal.

Mr. Dickerson in behalf of Mr. Harris read the report of the auditing committee as follows: "The auditing committee begs leave to report that it has made an examination of the treasurer's books and vouchers, and that the balances shown, amounting to \$1,179.68, are correct, and on deposit in the Harlem Savings Bank and in the Produce Exchange Bank in the name of the New York Entomological Society. The committee finds that the bills filed by the treasurer have been regularly examined and approved by the proper committee before payment, and that the treasurer has exercised his usual solicitude and care in the collection of the accounts due, and the protection of the interests of the Society in its financial department."

Respectfully submitted,

Edward D. Harris, Edgar L. Dickerson, E. B. Southwick. June, 1910.]

On motion of Mr. Groth the report was accepted and placed on file.

On motion of Dr. Osburn a vote of thanks was extended to the treasurer and secretary for their services.

The librarian reported the purchase of a number of pamphlet cases and of the General Catalogue of Coleoptera authorized by the Society. The regular exchanges had been carried on as usual and since the last meeting the following papers, etc., had been received:

Mittheilung d. Schweiz. Ent. Gesellschaft, Vol. XI, No. 10.

Monogr. Revision of the Order Strepsiptera. W. D. Pierce.

A Decade of N. A. Formicidæ. W. M. Wheeler.

A Small Collection of Ants from Victoria, Australia. W. M. Wheeler.

Predarwinian and Postdarwinian Biology. W. M. Wheeler.

Ants Collected by Professor F. Silvestri in the Hawaiian Islands. W. M. Wheeler.

The Ants of Isle Royale, Mich. W. M. Wheeler.

Ants Collected by Professor Silvestri in Mexico. W. M. Wheeler.

Die Metamorphose der Insekten von P. Deegener. W. M. Wheeler.

Coleopterorum Catalogus, Parts 1, 2, 3.

Bull. Soc. Entomol. d'Égypte, 1909, Nos. 1, 2.

Insects Injurious to Shade Trees. J. B. Smith.

Report of the Ent. Dept. N. J. Agri. Exp. Station, 1908.

Jahresheft d. Vereins f. Schesische Insektenkunde, 1909, No. 2.

The Insect World, XIII, Nos. 5, 6, 7.

Societas Entomologica, XXIV, Nos. 15, 16.

Mittheilungen Naturhist. Museum Hamburg, Vols. VI, VII, VIII, IX, XI,

XII, XIV.

The Canadian Entomologist, XLI, No. 12.

The N. Amer. Dragonflies of the Genus Macromia. E. B. Williamson.

Studies of N. Amer. Weevils. W. D. Pierce.

Revue Russe d'Entomol., VIII, Nos. 3, 4; IX, Nos. 1, 2.

Proc. Calif. Acad. Sciences, III, pp. 49-56.

Zeitschrift fur Wissensch. Insektenbiologie, V, No. 11.

Wiener Entomol. Zeitung, XXVIII, Nos. 9, 10.

The curator, Dr. Lutz, reported among other things the receipt for the local collection of *Papilio palamedes*, taken at West Hoboken, N. J., July 8, 1908.

Mr. Dow, of the nominating committee, placed on nomination:

President-C. W. Leng.

Vice-President-Dr. Raymond C. Osburn.

Secretary-H. G. Barber.

Treasurer-Wm. T. Davis.

Librarian-C. Schaeffer.

Curator-Dr. F. E. Lutz.

Delegates to the Academy of Sciences-Dr. E. B. Southwick.

Executive Committee-Dr. J. L. Zabriskie, G. W. J. Angell, G. P. Engelhardt, C. L. Pollard, C. E. Slaight. JOURNAL NEW YORK ENTOMOLOGICAL SOCIETY. [Vol. XVIII.

Publication Committee-C. Schaeffer, Dr. W. M. Wheeler, Dr. R. C. Osburn, Dr. F. E. Lutz.

On motion of Mr. Angell the nominations were closed.

On motion of Mr. Groth the by-laws were suspended and the secretary instructed to cast a single ballot for the nominations as read.

Mr. Southwick resigned the chair to the newly elected Vice-President Dr. Raymond C. Osburn.

On motion of Mr. Groth a hearty vote of thanks was extended to all of the outgoing officers.

The resignation of Mr. W. H. Browning was presented and accepted on motion, with regrets.

A circular letter from the James Fletcher Memorial Fund was read by the secretary and referred to the executive committee for action.

Dr. G. Lagai was proposed as an active member of the Society Mr. William Brenner, 83 Bleecker St., N. Y. City.

On motion of Mr. Groth the by-laws were suspended and the secretary instructed to cast a single ballot for the election of Mr. Brenner.

Dr. Lutz moved that a committee of three be appointed by the chair to draft resolutions of sympathy to be sent to Mr. Doll and recorded in the minutes concerning the death of his wife.

Mr. Angell exhibited some original pencil drawings made by Dr. Le Conte of *Platypsylla castoris*, compared them with the published illustration, and referred to the ability of Dr. Le Conte as an artist.

Mr. Wm. T. Davis, under title "Remarks on Insects Collected in Northern Georgia," spoke concerning some of the more interesting insects which he captured on his recent trip to Georgia and exhibited all of the material collected. Among other things he spoke of finding under a stone, on the side of Black Rock Mountain, a larger spider that was quite active though it had what was evidently the larva of an hymenopterous parasite attached to the base of its thorax.

Under stones and old logs several colonies of a very primitive ant, Stigmatomma pallipes Hald. were found. He quoted Professor Wheeler's remarks on this species from "The Ants of New Jersey." An interesting feature in one of the nests was a lamellicorn beetle larva to which a number of Stigmatomma larvæ, in various stages of growth, were attached.

He collected a number of *Canthon chalcites* Hald. and observed many others rolling their balls of manure. Comment was made upon several interesting observations concerning these tumble-bugs.

Under the bark of trees species of Myriopoda, belonging evidently to the family Geophilidæ, were found closely coiled about their eggs—about fifty in number in order to guard them from harm. Two specimens of the yucca moth, *Pronuba yuccasella*, were exhibited and their habits commented upon.

Mr. Ernest Shoemaker exhibited and spoke briefly concerning some rare beetles collected during the past summer. Among those mentioned were:

Leptotrachelus dorsalis Fabr., Brooklyn, N. Y.

Cymindis cribricollis Dej., Eagle Rock, N. J.

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Helluomorpha nigripennis Dei., District of Columbia. Brachylobus lithophilus Say, Brooklyn, N. Y. Necrophorus sayi Lap., Brooklyn, N. Y. Anthaxia viridifrons Lap., Montgomery Co., Md. Clerus lunatus Spin., Rockaway Beach, L. I. Geotrupes balyi Jek., Eagle Rock, N. J. Strangalia virilis Lec., District of Columbia. Typocerus lunatus Fabr., District of Columbia. Acanthoderes quadrigibbus Say, Alexander Co., Va. Eupogonius vestitus Say, District of Columbia. Oberea oculaticollis Say, Montgomery Co., Md. Oberea myops Hald., District of Columbia. Donacia flavipes Kirby, Saranac Lake, N. Y. Syneta ferruginea Germ., Great Notch, N. J. Lema savi Cr., Alexander Co., Va. Pachyonychus dimidiaticornis Cr., District of Columbia. Microrhopala xerene Neum., District of Columbia. Odontota bicolor Oliv., District of Columbia. Odontota horni Smith, District of Columbia. Rhipiphorus pectinatus Fal., Rockaway Beach, N. Y. Sphenophorus ochreus Lec., Rockaway Beach, N. Y. The Society then adjourned.

H. G. BARBER, Secretary.